

	Application No.	Applicant(s)
	10/038,806	TAKEUCHI, TIMOTHY M.
Notice of Allowability	Examiner	Art Unit
Do	Douglas W. Owens	2811
The MAILING DATE of this communication appeals all claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RID of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate commur GHTS. This application is su	this application. If not included nication will be mailed in due course. <b>THIS</b>
1. $oxed{oxed}$ This communication is responsive to <u>the reply filed Decemb</u>	<u>ber 13, 2004</u> .	
2. X The allowed claim(s) is/are <u>10-32</u> .		
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority und</li> <li>a) All b) Some* c) None of the:</li> <li>1.  Certified copies of the priority documents have</li> </ul>		r (f).
2.   Certified copies of the priority documents have	been received in Application	No
3.  Copies of the certified copies of the priority does	cuments have been received	in this national stage application from the
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	_	a reply complying with the requirements
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give		
5. CORRECTED DRAWINGS (as "replacement sheets") mus	t be submitted.	
(a) including changes required by the Notice of Draftspers		( PTO-948) attached
1)  hereto or 2)  to Paper No./Mail Date		
(b) including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or i	in the Office action of
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t	.84(c)) should be written on the he header according to 37 CFF	e drawings in the front (not the back) of R 1.121(d).
<ol> <li>DEPOSIT OF and/or INFORMATION about the depo- attached Examiner's comment regarding REQUIREMENT.</li> </ol>		
		•
Attachment(s)	5 Notice of Info	ormal Patent Application (PTO-152)
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftperson's Patent Drawing Review (PTO-948)</li> </ol>		mmary (PTO-413),
3. Information Disclosure Statements (PTO-1449 or PTO/SB/0		Mail Date Amendment/Comment
Paper No./Mail Date 4.  Examiner's Comment Regarding Requirement for Deposit	_	Statement of Reasons for Allowance
of Biological Material	9.	
	<del></del>	

## **DETAILED ACTION**

## Allowable Subject Matter

- 1. Claims 10 32 are allowed.
- 2. The following is an examiner's statement of reasons for allowance: The prior art of record does not teach, alone or in combination, an apparatus including "a buildup layer...disposed on only the first portion" and "a heat spreader mounted to the second portion." The prior art does not teach an apparatus including "a metal substrate core" with "a buildup layer disposed on the first portion of the substrate core" and "a heat spreader mounted to the second portion" The prior art does not teach these elements and further wherein "a bottom surface of the heat spreader [is] thermally coupled to the backside of the integrated circuit.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas W. Owens whose telephone number is 571-272-1662. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie C. Lee can be reached on 571-272-1732. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Douglas W Owens

Dougla t. Owen

Examiner Art Unit 29

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